Minutes for Rule 21 Working Group Meeting #60
October 13, 2004
Southern California Edison

There were 28 Working Group members in attendance. The next Meeting of the Working Group is scheduled for October 27 at Pacific Gas and Electric in Oakland, CA.

Scott Tomashefsky, Chair

Pat	Aldridge	SCE	Art	McAuley	PG&E
Tom	Blair	City of San Diego	Zerihun	Mekonnen	SCE
Werner	Blumer	CPUC/ED	Randy	Minnier	MPE Consulting
Petrina	Burnham	SDG&E	Ken	Parks	SDG&E
Bill	Cook	SDG&E	Edan	Prabhu	Reflective Ergies
George	Couts	SCE	Jim	Ross	CAC/EPUC
Kevin	Duggan	Capstone Turbine	Nora	Sheriff	CAC/EPUC
Jeff	Goh	PG&E	Richard	Smith	SDG&E
Ed	Grebel	SCE	Chuck	Solt	Lindh & Assoc
Mike	Iammarino	SDG&E	Gerome	Torribio	SCE
Karl	Iliev	SDG&E	Dan	Tunnicliff	SCE
Jerry	Jackson	PG&E	Mohammad	Vaziri	PG&E
Scott	Lacy	SCE			

Advice Letter Progress and Status

The City of San Diego protest of the SDG&E Advice Letter is still constraining adoption of all of the advice letters updating Rule 21. The City of San Diego has an installation with a PV generation unit that is eligible for Net-Metering and an engine generator that is not. Currently the only agreement they could get from SDG&E only allows *inadvertent export* which is not credited or compensated. The city feels it should be able to export all power from the PV unit for credit. The utility feels that any power from the PV first offset internal load before there is any export. The Utility has filed a separate Advice Letter requesting approval on how to handle "combined technologies".

Several possible alternatives for speedy resolution of the conflict were discussed. The utility will consider withdrawing the CT Advice Letter. In that event, the city may withdraw the protest, or the CPUC may choose to approve the Rule 21 Advice Letters from each utility.

PG&E has not yet filed its Rule 21Advice Letter, but plans to do so as soon as the protest issue is resolved.

CRS Quarterly Data Reports (Per CPUC Resolution E-3831)

Scott Tomashefsky still has not fully resolved with Valerie Beck whether the CPUC will rescind its requirement for CRS Quarterly reports. Until rescinded, the utilities are advised to continue reporting.

DG OII (CEC-04-Dist-Gen) Action item review

Scott Tomashefsky said that some of the direct testimony to the DG OIR addressed issues that are being considered by the Rule 21 Working Group. He will follow up with the PUC to assure there is no duplication of effort.

Originally, it was planned to have a draft report submitted by November 1 and a final document by November 10. We no longer need to prepare the draft. The only product will be the final document on Nov. 10.

Generator Net Metering
PG&E provided comments on the metering white paper. Nora Sheriff will incorporate those comments and changes that resulted from the discussion at this meeting. She will provide versopm 6 on Friday Oct. 15. PG&E also provided a matrix on metering requirements for interconnection into the PG&E system (attached).

Net Metering for Systems with "Combined" Technologies.
After much discussion, the group agreed that the major issue to resolve is contractual rather than technical.. There needs to be a provision to accommodate an "agreement" for export power which gives the generator credit for the eligible power exported and assures that no ineligible power is exported. The technical aspects of interconnection will often be more complex, but can be handled under Rule 21. There are also question related to metering. A revised draft by Gerry Torribio should be available by the Oct. 27 meeting in Oakland.

Interconnection Fees/Costs
PG&E provided a cost summary table (attached) based on its actual costs for the first 7 months of 2004. The table suggests that the costs incurred by the utilities exceed the fees collected from applicants. PG&E has instituted process changes that are not yet reflected in this data, but will probably result in substantial cost reductions.

DG developers and consultants at the meeting indicated that the current fees are not a significant burden. Steep increases would become a big burden.,

Dispute Resolution Process
PG&E provided a table comparing the Rule 21 Dispute Resolution process with the present Massachusetts process.

Randy Minnier presented a draft document on behalf of RealEnergy (attached). It presented specific recommendations for improving the system.

Interconnection Rules for Network Systems
This item is largely complete.

The Massachusetts Technology Collaborative is a meeting on October 20 to discuss the roll of DG in distribution planning. Chuck Whitaker will represent the CEC, and several utility members will also attend. This information may be useful in development of this section.

Technical Breakout Group

The entire discussion was centered on the issue of multiple tariffs (aka Combined Technologies) behind a single customer and meter. The question being addressed was: what are the technical requirements that should be applied to situations where the customer has two or more different generators with different tariffs ("multiple tariffs") behind one PCC and meter, where at least one generator is under a Net Metering ("NET") tariff. The other generator(s) may be NET or Non-NEM ("NON").

Multiple tariff schemes are complex. However, it is technically feasible to provide adequate protection and metering for all variations of NEM and NON. Evaluation of multiple tariffs will often require a full interconnection study.

Issue 1: Interconnection Requirements

Rule 21 as it exists allows for evaluation of all interconnections of multiple tariffs. Each application should state the existing condition (e.g., NEM system already installed), and the proposed change (e.g., a NON system to be installed). The utility review will evaluate the impact of the proposed change and prescribe the requirements for the change.

Examples of anticipated requirements:

Case 1: Two or more generators, with only one NEM:
If exporting when the NON is running:

1. Metering of the NEM generator
2. Perhaps additional protection to accommodate the export
3. Perhaps additional control to limit export to the maximum amount of the NEM units

If non-exporting, or capable of export only when the NON is **not** running:

1. Standard Rule 21 requirements. For example, if all interconnection systems are inverter based and certified, the system will probably qualify for simplified interconnection.

Case 2: Two or more generators, with at least two types of NEM:
If exporting:

1. Metering of each NEM generator if the two NEM tariffs are different (e.g. one PV and one fuel cell).
2. Perhaps additional protection to accommodate the export
3. Perhaps additional control to limit export to the maximum of the NEM units

If non-exporting, or capable of export only when the NON is not running:

Either:

1. Metering of each type of NEM generator

OR:

2. Acceptance by Customer that the lower of the two tariffs (as determined by the Utility) will be applied to all NEM generators.

For two or more NEM systems are on separate tariffs (behind the same customer meter), additional control or computation schemes may be needed to allow administration of the tariff. For example, NEM tariffs for real time or daily netting will be more complex to measure than that are netted on an annual basis will need schemes that are simpler than those that must be netted real time.

Additional Issues:

Protection for export while the NON is running will usually be more expensive. The customer should have the option to choose whether or not to export when the NON is running.

As an aside, the NON generator does not have to be metered for multiple tariff reasons. It may need metering for non-by-passable charges, CTC and other reasons.

Policy and Regulatory Direction Needed:

There should be specific policy and regulation addressing multiple tariffs. The regulation should address study and cost allocations for at least three variations for multiple tariffs based on the sequencing of installations:

1. The NEM was pre-existing and an application is made for a NON
2. The NON is pre-existing and application is made for an NEM
3. An application for NEM an NON are applied for together
4. Application (for a previously non-exporting system) is made requesting export when the NON was running

In each of the above cases, the policy should clearly establish which party bears the cost of study, additional equipment and testing, and additional metering.

The regulation should consider requiring the Utility to offer the customer the following choices:

1. for Case 1 and Case 2 systems, **either** accept additional metering and protection **or** accept no export while the NON is running
2. For Case 2 systems, **either** accept metering of each NET system, **or** accept a single tariff offered by the Utility.

The regulation should also address the quality, cost responsibility and ownership and maintenance responsibility of the above meters.

To Do List:

- Scott Tomashefsky will attempt to get Valerie Beck to provide a written instruction on the quarterly report.

- Mohammad Vaziri (and any others who choose to do so) will provide comments on the Focus II Final DG Monitoring Report before October 27.
- Nora Sheriff will provide a re-edited version of the white paper on DG Monitoring by October 15.
- Gerry Torribio will revise the draft on issues related to combined technologies and circulate well before Nov 27.

Attachments:

- PG&E Cost Matrix for Rule 21 Application
- PG&E draft interconnection requirements document for spot networks
- PG&E Metering Matrix
- RealEmergy draft on Dispute resolution